

# APPENDIX I

## MAKE-OR-BUY-PLAN

SURA's make-or-buy decisions are developed at the divisional level considering such criteria as efficiency of performance, scheduling, technical capability, core competencies, commercial or other source availability, contractor diversity, and cost. Prior to release of any solicitation for supplies, services, or construction estimated to exceed \$5,000,000 a make-or-buy determination will be made consistent with the guidelines in DEAR 970.1507. In addition to the above criteria such a determination will consider the acquisition background and objectives of the proposed acquisition.

SURA seeks every opportunity to subcontract for commercially available products and services from the private sector. It is our practice to competitively buy goods and services on firm-fixed-price subcontracts unless these goods and services can be made or performed at a lower cost by in-house personnel, or management determines that there are overriding programmatic policy reasons to justify a "make" decision. The SURA approach to make-or-buy decisions is aligned with the government's policy to rely on private commercial sources for supplies and services and has appropriately considered the relative costs in deciding performance under subcontracts.

### *Buy*

Since Jefferson Lab's inception, management has periodically reviewed laboratory needs and operations to ensure that our make-or-buy decisions have resulted in enhanced commercialization of technologies and the most cost-efficient operations. To this end, we have purchased goods and contracted out services rather than have them produced or performed by in-house personnel when these products or services have been complex and outside sources possess technical knowledge beyond that of laboratory personnel; are likely to cost less; are of a continuing nature; or would have required additional facilities or resources to carry out. Descriptions of our major procurements for contracted-out services follow.

***Security and Fire Protection.*** Unarmed security guard services have been provided by a subcontractor since FY87 to ensure a safe working environment for employees, users and visitors; and to protect laboratory property from theft, fire, damage, accident and trespass. Concerted efforts to partner with a small business subcontractor have developed an effective security program for our unclassified research laboratory, and have enhanced the quality of the service being provided. Additionally, site security and fire protection will be significantly enhanced by Central Alarm Notification System (CANS) which was procured by subcontract in FY99. Over the next two years the subcontractor will furnish and install the system which will integrate all existing fire alarm control panels, provide access control to on-site facilities, provide real time closed circuit TV, and provide video identification badging. Site security and fire protection are further enhanced by agreements that have been reached with the City of Newport News Fire and Police Departments. In accordance with these agreements the Jefferson Lab site is considered by the City to be under joint jurisdiction, and as such the City agreed to provide the Lab, at no cost, all police and fire services which are provided to the community.

**Material Services.** In FY93 an internal analysis determined that it was more cost effective to contract out the services of shipping and receiving, property management and mail distribution. Additional functions (movement of property; delivery and pickup; meeting support and related services for laboratory meetings; conferences and workshops; and internal relocation of offices) were added to this subcontract in FY94. The small, minority owned business provides responsive, high quality services. The subcontractor has implemented operations improvements that have resulted in more timely delivery of mail and other products, highly accurate accounting for laboratory property, and very responsive support for meeting set-ups.

**Copy Services.** Prior to award of a comprehensive copy service subcontract in FY97, copies were being made on a large number of old, unreliable convenience copiers which were purchased from or leased from multiple vendors. After completing an extensive study on ways to improve the efficiency and effectiveness of copying at the Lab, a strategy was developed to contract for a full service copy management subcontract. The fixed priced subcontract that was awarded replaced all copiers with new, highly reliable copiers; reduced the number of copiers on site by 40%; significantly enhanced the quality of copies and service provided; and considerably reduced Jefferson Lab man-hours, waste and administrative cost. The services include a staffed, full-service copy center with site-wide pickup and delivery services; supplies (including multiple sizes, colors and weights of paper, plus transparencies); as well as copier equipment and maintenance. Additionally, Jefferson Lab complies with the requirement to use the United States Government Printing Office (GPO) for printing jobs of greater than 25,000 total pages or greater than 5,000 copies of a single page. The regional GPO office is also used for specialized services, including composition, plate making, presswork, and binding.

**Facility Services (Janitorial, Refuse Collection and Disposal/Recycling, Grounds Maintenance, Pest Control).** These services enhance the quality of work life for laboratory staff, users, and visitors. While performance by these subcontractors has always been satisfactory, it is noteworthy that these subcontractors respond promptly to Jefferson Lab needs and work diligently to continuously improve service. All subcontracts are fixed priced and performance is very cost effective. Additionally, the janitorial services subcontract has been awarded to small, minority, woman-owned businesses since FY88.

**Facilities and Equipment Maintenance (HVAC, Electrical Power Distribution, Fire Alarm and Suppression, Crane Forklift, Elevator).** Jefferson Lab subcontracts out maintenance of our buildings, equipment and other related real property and equipment assets in a manner that preserves, protects and extends the usefulness and life of facilities and equipment. All subcontracts are fixed priced and performance is very cost effective.

**Architect-Engineer Design.** Small business subcontractors working in collaboration with Jefferson Lab engineers perform A/E design work for Jefferson Lab construction. Costs have been contained by the effective administration of subcontracts for tasks and projects, such that designs were accomplished at a fair cost on a timely schedule, and to the satisfaction of the user. Jefferson Lab will continue to use A/E subcontractors on indefinite quantity subcontracts for design of specialty projects and for additional support.

**Civil Construction.** All Jefferson Lab civil construction is subcontracted to outside firms using fixed price subcontracts, with almost all being set aside for small business. Jefferson Lab staff performs construction contract management during all phases of each project. Facilities have been constructed in accordance with requirements, within the desired timeframe and budget, and in accordance with relevant and appropriate codes. An intensive effort has been made to monitor subcontract EH&S (environment, health, and safety) performance. In this regard, Jefferson Lab provides for safety incentive payments for subcontractors with notable records of EH&S practices as well as safety penalties (contract deducts) for subcontractors who violate Jefferson Lab EH&S policies, procedures, or practices. Jefferson Lab's implementation of safety penalties and incentives in certain construction subcontracts has been noted by the Department of Energy Oak Ridge Operations Office and the DOE Site Office as a strength in organizational responsibility and accountability, and a positive factor in subcontractor performance.

**Equipment Calibration and Repair.** Jefferson Lab subcontracts out the calibration and repair of its portable equipment to local vendors who coordinate with laboratory staff to pick up pieces of test equipment, perform calibration and/or repair, and return the equipment to the site on a weekly basis. Equipment that is beyond the capability of local vendors is subcontracted to the manufacturers or their approved repair facilities. This program is an essential part of the laboratory's quality assurance program, in that it delineates calibration and testing requirements for equipment used on critical applications and provides a mechanism for periodic and scheduled calibration and repair.

**Dosimetry Services.** To protect individuals working on the accelerator site and ensure a safe environment for the laboratory community and general public, Jefferson Lab monitors individual exposure to photons, beta particles and neutrons through the use of personal dosimeters. It would be costly and unrealistic for the Lab to develop and maintain the expertise, equipment and testing capability necessary for the dosimetry program. Therefore, Jefferson Lab subcontracts for DoE Laboratory Accreditation Program (DOELAP) certified dosimetry services. The subcontractor provides an average of 1800 dosimeters quarterly, with associated readings, summaries and annual reports.

**Food Services.** Jefferson Lab's 60-seat cafeteria is operated by a subcontractor to provide meals (breakfast and lunch) for staff, users, and visitors; catering services for special events; and vending machines for beverages and snacks. In FY97 a new subcontractor was selected based on a best value source evaluation of offers received. The new subcontractor has significantly improved the quality of food, its presentation and service, while continuing to contain the cost of operations so only a nominal subsidy is required. In light of the competition from numerous food establishments in the vicinity, the increase in cafeteria patronage since awarding the new subcontract is particularly noteworthy.

**Library Subscription Services.** The Jefferson Lab Library collection includes approximately 90 national and international journals and serial publications that must be renewed periodically. Instead of tracking renewal dates and contacting each individual publisher separately to obtain and renew subscriptions for, and handle discrepancies with, these periodicals, the Lab subcontracts for these services. The subcontractor provides the Lab with a single point of contact for placing orders, resolving discrepancies (such as missing issues), and payment. In

addition, the subcontractor can in some cases negotiate a discount that would not be available to Jefferson Lab, and passes these savings on to us.

**Travel Services.** Jefferson Lab uses a travel agency to perform travel-related services such as transportation reservations, ticketing, vehicle rental, and arrangements for lodging, and provision of travel-related information for laboratory staff and users. This service has been provided by small woman-owned businesses since FY90.

**Employee Assistance Program.** Since FY90, Jefferson Lab has subcontracted its Employee Assistance Program (EAP) to assist employees whose lives are being affected by any of a variety of "life problems". Resources available through the EAP far exceed any comparable resources that could be provided by laboratory. The EAP provider is available on a 24-hour basis and maintains confidentiality of employees using its services.

**Training.** Due to the small size of the Jefferson Lab Training Section, external trainers have fulfilled many of our training and development needs. External trainers are subcontracted on a fixed-price basis to provide specific technical, EH&S, leadership, management, supervisory and other training programs. An analysis and evaluation is performed for each category of training need to ascertain the efficacy and availability of in-house trainers. A decision is made to use external sources when doing so meets the needs of the laboratory staff in the most cost efficient manner.

**Transportation (Non-Travel-Related).** Jefferson Lab subcontracts through the General Services Administration (GSA) for the use of various vehicles for transportation needs both on- and off-site. In the past the use of this fleet has resulted in a cost savings over the alternatives of purchasing and maintaining our own vehicles or of leasing vehicles on the open market. After completing site construction activities, the Jefferson Lab reassessed the number of vehicles required and in FY94 reduced its GSA fleet by 50%. To supplement the GSA leased vehicles, a requirements type subcontract arrangement was negotiated with a small business that provides a variety of transportation services, including specialized vehicles for laboratory personnel, to meet specific needs as they arise. Jefferson Lab will continue to assess the size of the GSA vehicle fleet and adjust accordingly, using the limousine service on an as-need basis and when its use is more cost-effective.

### *Make*

In-house capabilities for the items listed below are essential for meeting current and future mission requirements, maintaining facility operations, and conducting authorized research. Performing the functions by Jefferson Lab staff assures that core competencies are properly supported.

**Laboratory Operations.** Operation of the laboratory is an integral part of the core competencies; therefore contracting out is not an option. Superconducting radio-frequency technology and cryogenics technology are essential elements of maintaining and operating the Continuous Electron Beam Accelerator Facility. Additionally, there are significant safety and environmental

dangers which must be constantly monitored and problems addressed real time that preclude use of a contractor.

**Configuration Management.** Configuration management directly supports core competencies necessary to design, construct and upgrade the accelerator and research facilities. Accordingly, it is not feasible to contract out that responsibility.

**Financial Services (Payroll/Accounts Payable/Receivable).** The Laboratory requires a real time system that is controlled by Laboratory staff to properly monitor costs and purchase order commitments, and manage budgeted resources. The entire Laboratory financial package, Costpoint, is a fully integrated accounting system between various accounting functions designed for companies in project-oriented environments including government contractors. Some of the functions Costpoint includes are: General Ledger, Labor, Payroll, Accounts Payable, Accounts Receivable, Purchasing, Travel, Receiving, Project Costing/Budgeting, and adhoc reporting. Also, as a non-integrated contractor, in order to make appropriate drawdowns from our letter of credit, we must always know when payables are due. These essential functions associated with management and operation of the Laboratory are critical, and potential disruptions or delays that might result from performance by an outside source are unacceptable.

**Public Information Program.** The unique, highly technical nature of Jefferson Lab's advanced nuclear research makes it essential that those responsible for the Public Information Program be continually abreast of the Laboratory's plans and achievements. Making the program an integral part of the Lab assures that (1) Laboratory research is accurately presented to the scientific community, government and public; (2) complete and timely information is provided to support the budget process; and (3) good community relations are maintained. This function is principally performed by the Director's Office staff with some requirements subcontracted when a task can be better performed by an individual or company possessing skills or capabilities not available in-house.

**Real & Personal Property Management.** While the overall management of the function is directed by Jefferson Lab staff, the daily work associated with the area is performed by subcontract. By necessity Jefferson Lab's staff oversees the subcontracted work and serves as the direct interface with the government on Laboratory real and personal property issues.

**Safety Analysis and Review.** Safety, health, and environmental protection (EH&S) considerations are intrinsic to all work at Jefferson Lab and are essential to the Lab's overall scientific progress, productivity, and cost-effectiveness. Imbedding EH&S into all operations through an Integrated Safety Management system can only be done by in-house resources.

**Health Care.** The physician and nurses who staff the on-site medical services clinic initially were contractor employees; however, they were converted to Laboratory employees to maintain continuity when it was determined that the cost of contracting out this service was roughly equivalent to performing it in house. Continuity enables the medical services staff to fully understand the operations of the Laboratory, and develop and maintain relationships with employees over time. This approach promotes overall wellness, improves safety and enhances productivity. Certain specialized services are contracted out in support of the medical services function, such as radiological dosimetry and laboratory testing services.

**Library Services.** A highly specialized library such as the Lab's requires continual interaction with the Laboratory's scientific, technical and administrative staff to develop and maintain a relevant and comprehensive collection for researchers and managers. The stability afforded by an in-house library staff is essential to the library's ongoing support of the Laboratory's scientific mission.

**Warehouse and Spares.** A significant portion of work associated with these functions is accomplished by subcontract through the material services subcontract. Additionally, the requirement for warehousing and maintaining a spares inventory is being reduced through just-in-time contracting. The portion of the function which remains must be accomplished in-house to provide the support necessary to maintain continuity of operations and research.

**Records Management/ Storage.** Records management is decentralized at the Laboratory, to ensure integration of this important component into all laboratory functions. The oversight and coordination of the laboratory's records management program is a part-time responsibility of the library staff, who provide guidance to the divisions and manage the Lab's records storage inventory. The library staff's understanding of the Lab's contractual requirements and familiarity with the Laboratory's functions are key components of their ability to assist the divisions in managing records. Periodic cost-benefit analyses of on-site versus off-site record storage have not shown significant savings to be gained from storing records off-site.

**Lock and Key Control.** A Bests Access System was purchased to provide high security, restricted access to Laboratory facilities. The security system is currently being upgraded by subcontracting for installation of a Centralized Alarm Notification System. Performance of the lock and key control functions associated with these systems must be performed in-house to maintain the security interests of Laboratory.

### ***Make or Buy***

Make-or-buy determinations will be made for future goods and services that exceed \$5,000,000. As such requirements develop, an analysis and evaluation will be performed of the functions to ascertain the most efficient and cost effective means of obtaining the required goods or services. Environmental factors such as - approved NEPA Categorical Exclusions and the requirements of the DOE approved Lab Radiation Control Manual will be key decision criteria in all Make or Buy Decisions.

Jefferson Lab has commenced early planning activities for the below listed major upgrade projects which will be subject to make or buy determinations under this plan.

**Accelerator Upgrade.** The energy upgrade to 12 GEV is currently anticipated to cost approximately \$50M over a three-year period. Accelerator upgrades require increased voltage gain in the existing accelerator or possibly additional structures, increased magnet fields and increases in cryogenic capacity that affect both the accelerator and experimental systems. This upgrade project will require cryomodules, cryogenic systems and large magnets such as the

Spreader Recombiner and others. The major components of these systems will be subjected to Make or Buy decisions in accordance with this plan following funding and DOE approvals.

*Experimental Hall D.* The lab is considering a new experimental Hall D which would require such systems as beam dump, magnets such as the Tagger and others, supporting cryogenics and many others. The anticipated cost for this project is approximately \$50M over a three-year period and is of course subject to DOE approval and funding. The lab will also complete Make or Buy analyses on the major components of this new project.

*End Station Refrigerator Upgrade.* The lab is considering an upgrade to the existing refrigeration system which will entail new construction and the installation of an owned 4KW refrigerator. This project, expected to cost approximately \$1M, will require a new building, installation of additional cryogenic components and integration with the existing systems. Make or buy criteria will be considered in major elements of this project.

*Environmental NEPA Reviews and Environmental Waste/Low Level Radiation Removal.* Integral to the above upgrades is performance of studies related to these environmental issues. Make or buy criteria will be considered for the required studies.

### *Conclusion*

This make-or-buy plan will be reviewed annually and if any changes are necessary, the changes will be made and submitted to the Contracting Officer for approval in accordance with the Make-or-Buy clause. Based on what we know now and our past experience using commercial sources to meet most of our needs, Jefferson Lab will continue to rely heavily on private commercial sources for our supplies and services.